SHORT TITLE

Act Mar. 3, 1901, ch. 872, § 31, formerly § 23, as added Jan. 8, 1988, Pub. L. 100–235, § 3(3), 101 Stat. 1728; renumbered § 31 and amended Pub. L. 100–418, title V, §§ 5114(1), 5115(a)(2), Aug. 23, 1988, 102 Stat. 1432, 1433, provided that: ''This Act [enacting this chapter] may be cited as the National Institute of Standards and Technology Act.''

SAVINGS PROVISION

Act Mar. 3, 1901, ch. 872, § 29, as added Aug. 23, 1988, Pub. L. 100–418, title V, § 5161, 102 Stat. 1449, provided that: ''All rules and regulations, determinations, standards, contracts, certifications, authorizations, delegations, results and findings of investigations, or other actions duly issued, made, or taken by or pursuant to this Act [enacting this chapter], or under the authority of any other statutes which resulted in the assignment of functions or activities to the Secretary, the Department, the Director, or the Institute, as are in effect immediately before the date of enactment of this section [Aug. 23, 1988], and not suspended by the Secretary, the Director, the Institute or the courts, shall continue in full force and effect after the date of enactment of this section until modified or rescinded.''

CROSS REFERENCES

Department of Commerce as having jurisdiction and supervision over National Institute of Standards and Technology, see section 1511 of this title.

§ 272. Establishment, functions, and activities

(a) Establishment of National Institute of Standards and Technology

There is established within the Department of Commerce a science, engineering, technology, and measurement laboratory to be known as the National Institute of Standards and Technology (hereafter in this chapter referred to as the ''Institute'').

(b) Functions of Secretary and Institute

The Secretary of Commerce (hereafter in this chapter referred to as the ''Secretary'') acting through the Director of the Institute (hereafter in this chapter referred to as the ''Director'') and, if appropriate, through other officials, is authorized to take all actions necessary and appropriate to accomplish the purposes of this chapter, including the following functions of the Institute—

(1) to assist industry in the development of technology and procedures needed to improve quality, to modernize manufacturing processes, to ensure product reliability, manufacturability, functionality, and cost-effectiveness, and to facilitate the more rapid commercialization, especially by small- and medium-sized companies throughout the United States, of products based on new scientific discoveries in fields such as automation, electronics, advanced materials, biotechnology, and optical technologies;

(2) to develop, maintain, and retain custody of the national standards of measurement, and provide the means and methods for making measurements consistent with those standards, including comparing standards used in scientific investigations, engineering, manufacturing, commerce, industry, and educational institutions with the standards adopted or recognized by the Federal Government;

(3) to enter into contracts, including cooperative research and development arrangements, in furtherance of the purposes of this chapter;

(4) to provide United States industry, Government, and educational institutions with a national clearinghouse of current information, techniques, and advice for the achievement of higher quality and productivity based on current domestic and international scientific and technical development;

(5) to assist industry in the development of measurements, measurement methods, and basic measurement technology;

(6) to determine, compile, evaluate, and disseminate physical constants and the properties and performance of conventional and advanced materials when they are important to science, engineering, manufacturing, education, commerce, and industry and are not available with sufficient accuracy elsewhere;

(7) to develop a fundamental basis and methods for testing materials, mechanisms, structures, equipment, and systems, including those used by the Federal Government;

(8) to assure the compatibility of United States national measurement standards with those of other nations;

(9) to cooperate with other departments and agencies of the Federal Government, with industry, with State and local governments, with the governments of other nations and international organizations, and with private organizations in establishing standard practices, codes, specifications, and voluntary consensus standards;

(10) to advise government and industry on scientific and technical problems; and

(11) to invent, develop, and (when appropriate) promote transfer to the private sector of measurement devices to serve special national needs.

(c) Implementation activities

In carrying out the functions specified in subsection (b) of this section, the Secretary, acting through the Director and, if appropriate, through other appropriate officials, may, among other things—

(1) construct physical standards;

(2) test, calibrate, and certify standards and standard measuring apparatus;

(3) study and improve instruments, measurement methods, and industrial process control and quality assurance techniques;

(4) cooperate with the States in securing uniformity in weights and measures laws and methods of inspection;

(5) cooperate with foreign scientific and technical institutions to understand technological developments in other countries better;

(6) prepare, certify, and sell standard reference materials for use in ensuring the accuracy of chemical analyses and measurements of physical and other properties of materials;

(7) in furtherance of the purposes of this chapter, accept research associates, cash donations, and donated equipment from industry, and also engage with industry in research to develop new basic and generic technologies for traditional and new products and for improved production and manufacturing;

(8) study and develop fundamental scientific understanding and improved measurement, analysis, synthesis, processing, and fabrication methods for chemical substances and compounds, ferrous and nonferrous metals, and all traditional and advanced materials, including processes of degradation;

(9) investigate ionizing and nonionizing radiation and radioactive substances, their uses, and ways to protect people, structures, and equipment from their harmful effects;

(10) determine the atomic and molecular structure of matter, through analysis of spectra and other methods, to provide a basis for predicting chemical and physical structures and reactions and for designing new materials and chemical substances, including biologically active macromolecules;

(11) perform research on electromagnetic waves, including optical waves, and on properties and performance of electrical, electronic, and electromagnetic devices and systems and their essential materials, develop and maintain related standards, and disseminate standard signals through broadcast and other means;

(12) develop and test standard interfaces, communication protocols, and data structures for computer and related telecommunications systems;

(13) study computer systems (as that term is defined in section 278g–3(d) of this title) and their use to control machinery and processes;

(14) perform research to develop standards and test methods to advance the effective use of computers and related systems and to protect the information stored, processed, and transmitted by such systems and to provide advice in support of policies affecting Federal computer and related telecommunications systems;

(15) determine properties of building materials and structural elements, and encourage their standardization and most effective use, including investigation of fire-resisting properties of building materials and conditions under which they may be most efficiently used, and the standardization of types of appliances for fire prevention;

(16) undertake such research in engineering, pure and applied mathematics, statistics, computer science, materials science, and the physical sciences as may be necessary to carry out and support the functions specified in this section;

(17) compile, evaluate, publish, and otherwise disseminate general, specific and technical data resulting from the performance of the functions specified in this section or from other sources when such data are important to science, engineering, or industry, or to the general public, and are not available elsewhere;

(18) collect, create, analyze, and maintain specimens of scientific value;

(19) operate national user facilities;

(20) evaluate promising inventions and other novel technical concepts submitted by inventors and small companies and work with other Federal agencies, States, and localities to provide appropriate technical assistance and support for those inventions which are found in the evaluation process to have commercial promise;

(21) demonstrate the results of the Institute's activities by exhibits or other methods of technology transfer, including the use of scientific or technical personnel of the Institute for part-time or intermittent teaching and training activities at educational institutions of higher learning as part of and incidental to their official duties; and

(22) undertake such other activities similar to those specified in this subsection as the Director determines appropriate.

(d) Management costs

In carrying out the extramural funding programs of the Institute, including the programs established under sections 278k, 278*l*, and 278n of this title, the Secretary may retain reasonable amounts of any funds appropriated pursuant to authorizations for these programs in order to pay for the Institute's management of these programs.

(Mar. 3, 1901, ch. 872, §2, 31 Stat. 1449; July 22, 1950, ch. 486, §1, 64 Stat. 371; June 22, 1972, Pub. L. 92–317, §3(b), 86 Stat. 235; Jan. 8, 1988, Pub. L. 100–235, §3(1), 101 Stat. 1724; Aug. 23, 1988, Pub. L. 100–418, title V, §5112(a), 102 Stat. 1428; Feb. 14, 1992, Pub. L. 102–245, title II, §201(e), 106 Stat. 19.)

AMENDMENTS

1992—Subsec. (d). Pub. L. 102–245 added subsec. (d).

1988—Pub. L. 100–418 amended section generally, substituting provisions relating to establishment, functions and activities of the National Institute of Standards and Technology and the Secretary of Commerce for provisions which authorized Secretary to undertake certain enumerated functions and activities related to the National Bureau of Standards and for which need might arise in operations of Government agencies, scientific institutions, and industrial enterprises.

Par. (20). Pub. L. 100–235 added par. (20).

1972—Par. (19). Pub. L. 92–317 inserted provisions authorizing use of National Bureau of Standards personnel for teaching and training activities without additional compensation.

1950—Act July 22, 1950, provided basic authority for performance of certain functions and activities of Department of Commerce.

INTERNATIONAL STANDARDS

Pub. L. 100–519, title I, §112, Oct. 24, 1988, 102 Stat. 2592, provided that:

''(a) PROGRAM.—The Secretary, acting through the Director of the National Institute of Standards and Technology and other appropriate officials, shall seek funding for and establish, within 6 months after the date of the enactment of this Act [Oct. 24, 1988], a program to assist other countries in the development of their domestic standards which are compatible with standards in general use in the United States. After the program is established, it shall be funded through voluntary contributions from the private sector to fully reimburse the United States for expenses incurred during fiscal years 1989 and 1990. The program shall begin on a pilot basis focusing on one or two countries or groups of countries which are major United States trading partners and have expressed interest in such program. The Secretary shall ensure that contributions which are earmarked by country are spent to assist the development of standards by that country or group of countries.

''(b) LONG-TERM PLAN.—No later than June 30, 1989, the Secretary shall submit to the Committee on

Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a long-term plan for assistance under this section for each nation or group of nations which annually has imports of at least $1,000,000,000 from the United States (or has the potential for being a major importer from the United States) and which desires such assistance. The plan shall include a description of the resources needed to provide such assistance, the appropriate and likely sources of such funds, and the appropriate relationship between the program established under this section and private sector standards organizations. Special consideration is to be given to the feasibility of establishing a data base and other methods for making standards information developed in cooperation with one country available to other countries.''

INITIAL ORGANIZATION PLAN FOR INSTITUTE

Section 5112(d) of Pub. L. 100–418 provided that:

''(1) At least 60 days before its effective date and within 120 days after the date of the enactment of this Act [Aug. 23, 1988], an initial organization plan for the National Institute of Standards and Technology (hereafter in this part [see Short Title of 1988 Amendment note set out under section 271 of this title] referred to as the 'Institute') shall be submitted by the Director of the Institute (hereafter in this part referred to as the 'Director') after consultation with the Visiting Committee on Advanced Technology, to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate. Such plan shall—

''(A) establish the major operating units of the Institute;

''(B) assign each of the activities listed in section 2(c) of the Act of March 3, 1901 [15 U.S.C. 272(c)], and all other functions and activities of the Institute, to at least one of the major operating units established under subparagraph (A);

''(C) provide details of a 2-year program for the Institute, including the Advanced Technology Program;

''(D) provide details regarding how the Institute will expand and fund the Inventions program in accordance with section 27 of the Act of March 3, 1901 [15 U.S.C. 278m]; and

''(E) make no changes in the Center for Building Technology or the Center for Fire Research.

''(2) The Director may revise the organization plan. Any revision of the organization plan submitted under paragraph (1) shall be submitted to the appropriate committees of the House of Representatives and the Senate at least 60 days before the effective date of such revision.

''(3) Until the effective date of the organization plan, the major operating units of the Institute shall be the major operating units of the National Bureau of Standards that were in existence on the date of the enactment of this Act [Aug. 23, 1988] and the Advanced Technology Program.''

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY; SMALL BUSINESS PLAN

Section 5163(b) of Pub. L. 100–418 provided that: ''The Director of the National Institute of Standards and Technology shall prepare a plan detailing the manner in which the Institute will make small businesses more aware of the Institute's activities and research, and the manner in which the Institute will seek to increase the application by small businesses of the Institute's research, particularly in manufacturing. The plan shall be submitted to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives not later than 120 days after the date of the enactment of this Act [Aug. 23, 1988].''

COMPUTER SECURITY

Nothing in amendment by Pub. L. 100–235 to be construed to constitute authority to withhold information sought under section 552 of Title 5, Government Organization and Employees, or to authorize any Federal agency to limit, restrict, regulate, or control collection, maintenance, disclosure, use, transfer, or sale of any information that is privately owned information, disclosable under section 552 of Title 5 or other law requiring or authorizing public disclosure of information, or public domain information, see section 8 of Pub. L. 100–235, set out as a note under section 759 of Title 40, Public Buildings, Property, and Works.

CONSTRUCTION OF RADIO LABORATORY BUILDING

Act Oct. 25, 1949, ch. 703, 63 Stat. 886, provided for the construction and equipment of a suitable radio laboratory building, together with necessary utilities and appurtenances thereto, under a limit of cost of $4,475,000, for the National Bureau of Standards.

CONSTRUCTION OF A GUIDED-MISSILE RESEARCH LABORATORY

Act Oct. 25, 1949, ch. 728, 63 Stat. 905, provided for the construction and equipment of a research laboratory building, suitable for use as a guided-missile laboratory, together with necessary utilities and appurtenances thereto, under a limit of cost of $1,900,000, for the National Bureau of Standards.

SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 1454 of this title.

§ 272a. Technology services

In addition to such other technology services and technology extension activities which may be mandated or authorized by law, and in order to help improve the use of technology by small and medium-sized industrial firms within the United States, the Director of the National Institute of Standards and Technology, as appropriate, shall—

(1) work directly with States, local governments, and other appropriate organizations to provide for extended distribution of Standard Reference Materials, Standard Reference Data, calibrations, and related technical services and to help transfer other expertise and technology to the States and to small businesses and other businesses within the States;

(2) evaluate those inventions from small businesses or individuals which have a significant potential for improving competitiveness;

(3) provide support for workshops on technical and entrepreneurial topics and share information developed through the Malcolm Baldrige Quality Award Program; and

(4) work with other Federal agencies to provide technical and related assistance to the States and businesses within the States.

(Pub. L. 100–519, title I, § 109, Oct. 24, 1988, 102 Stat. 2591.)

CODIFICATION

Section was enacted as part of the National Institute of Standards and Technology Authorization Act for Fiscal Year 1989, and not as part of the National Institute of Standards and Technology Act which comprises this chapter.

§ 272b. Annual budget submission

The National Institute of Standards and Technology shall annually submit to the Congress, at the time of the release of the President's budget, a three year budget estimate for the Institute, including funding estimates for each major account and new initiative.